

REMARKS

The present invention is a method of forming a device cover having a predetermined shape. The method includes, with respect to the disclosed embodiments, forming a preliminary cover member by attaching a first surface of an electroluminescent foil to a first surface of an electrically insulating foil 38. The electrically insulating foil has the predetermined shape and has at least one first opening 20 and at least one second opening 40 therethrough. The electroluminescent foil has at least one opening therethrough corresponding with the at least one first opening through the electrically insulating foil and the at least one second opening exposes a surface of the electroluminescent foil. The preliminary cover member is placed in a mold of the predetermined shape. The mold has bosses corresponding with the at least one first opening and the at least one second opening. Plastic is injected into the mold and into contact with the preliminary cover member to form the device cover. The bosses provide openings through the plastic corresponding to the at least one first opening and the at least one second opening so that when the mold is opened, the at least one first opening extends through the device cover and the at least one second opening extends to the surface of the electroluminescent foil. See paragraph [0030] where it is taught "an opening passes through the rigid support base 30 and thermally insulating foil 32, exposing a portion of the surface of the electroluminescent foil" and further, paragraph [0035] where it is taught that "the preliminary cover member is placed in a mold having bosses with correspond with openings 14-22 and 40 to provide corresponding openings in rigid support base 30".

Claims 1, 2 and 4-25 stand rejected under 35 U.S.C. §103 as being unpatentable over United States Patent 5,780,965 (Cass et al) in view of EP 0 932 288 A1. The Examiner reasons in part as follows:

Claims 1, 2,4-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cass et al., USP 5,780,965 in view of EP 0 932 288 A1.

The cited primary reference teaches the basic claimed process of forming a device cover including a composite or laminate foil having multiple layers, further including an electroluminescent. The detailed method steps include providing an electroluminescent display having a transparent layer (16), also at least one translucent layer (18), and an electroluminescent planar layer (22). The transparent layer (16) may be preformed and provided with at least one aperture (17c). The translucent layer is provided with window sections and may include graphics or decorative printings. Note also that the plastic materials used to form the transparent and translucent layers are well known in the molding art to possess electrically insulative features. The composite or laminate is in sheet form and may be further shaped into a three-dimensional configuration using conventional shaping or molding means. When shaped, it is placed within a cavity of an injection mold, and a resin forming substrate is provided in contact with the shaped sheet to form an integrally attached substrate. See col. 3, lines 30-50, 59-62; col. 4, lines 5-18, 30-55, and col. 5, lines 5-25.

The cited primary reference does not teach providing a mold with bosses corresponding to the openings provided in the composite or laminate foil.

The cited secondary reference teaches as conventional the molding of a device cover using a pre-shaped composite foil having openings therein, wherein the openings are used to position pins therein prior to molding of the substrate, to prevent resin from closing the openings. The detailed method steps include providing a composite foil-decorating film having multiple layers. The composite foil-film is brought into contact with a molding surface and shaped within the molding cavity. The mold is provided with slide cores that are pushed through the film into the mold cavity into contact with the upper mold half, wherein the step of pushing punches holes within the film. Resin is molded into the mold cavity in integral contact with the composite foil-film. During molding, the slide cores stay in contact with the mold have and serve as mold bosses to keep the openings open until the resin is cured. Please see page 8, paragraphs 0054-0058.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a mold with bosses corresponding to the openings within the composite film, in view of the added reference, for keeping the openings open until the resin, being molded in integral contact with the composite film, is cured.

These grounds of rejection are traversed for the following reasons.

Even if the proposed combination of references were made as suggested by the Examiner, the claimed invention would not be achieved. Moreover, it is submitted that the proposed combination is based upon impermissible hindsight.

Newly submitted claim 48 recites:

A method of forming a device cover having a predetermined shape, said method comprising:

forming a preliminary cover member by attaching a first surface of an electroluminescent foil to a first surface of an electrically insulating foil, the electrically insulating foil having the predetermined shape and having at least one first opening and at least one second opening therethrough, the electroluminescent foil having at least one opening therethrough corresponding with the at least one first opening through the electrically insulating foil and the at least one second opening exposes a surface of the electroluminescent foil;

placing the preliminary cover member in a mold of the predetermined shape, the mold having bosses corresponding with the at least one first opening and with the at least one second opening; and

injecting plastic into the mold and into contact with the preliminary cover member to form the device cover, the bosses providing openings through the plastic corresponding with the at least one first opening and the at least one second opening so that when the mold is opened the at least one first opening extends through the device cover and the at least one second opening extends to the surface of the electroluminescent foil.

and newly submitted claim 61 defines:

A method of forming a device cover having a predetermined shape, said method comprising:

forming a preliminary cover member by attaching a first surface of an electroluminescent foil to a first surface of an electrically insulating foil, the electrically insulating foil having the predetermined shape, the electroluminescent foil having at least one first opening

shape, the electroluminescent foil having at least one first opening therethrough;

forming at least one first opening through the electrically insulating foil at a location corresponding with the at least one first opening through the electroluminescent foil and at least one second opening therethrough;

placing the preliminary cover member in a mold of the predetermined shape, the mold having bosses corresponding with the at least one first opening and with the at least one second opening; and

injecting plastic into the mold and into contact with the preliminary cover member to form the decorative cover, the bosses providing openings through the plastic corresponding with the at least one first and the at least one second opening so that when the mold is opened, the at least one first opening extends through the device cover and the at least one second opening extends to the surface of the electroluminescent foil.

Each of claims 48 and 61 define in substance the forming of a cover with an electroluminescent foil attached to electrically insulating foil with the electrically insulating foil having the predetermined shape and having at least one first opening and at least one second opening therethrough and the electroluminescent foil has at least one opening therethrough corresponding to the at least one first opening through the electrically insulating foil and the at least one second opening exposes a surface of the electroluminescent foil. There is no counterpart of the at least one second opening through the electrically insulating foil which exposes a surface of the electroluminescent foil as recited in independent claims 48 and 61.

Neither Cass et al nor the EP reference, even if combined, do not teach a method which results in a device cover having the at least one first opening and the at least one second opening through the electrically insulating foil which after the molding operation is complete, has the at least one first hole extending through the device cover and the at least one second hole extending to the surface of the electroluminescent foil which facilitates internal connections such as 48 and 50

illustrated in Fig. 5 of the drawings. The EP reference, while disclosing a foil decorating film, does not disclose that the film is electroluminescent. See paragraph [0029] where reference to a LED is made for illumination inside the cellular phone cover.

Moreover, the dependent claims define further aspects of the present invention which are not rendered obvious by a combination of Cass et al and the EP reference. It is submitted that such features are not conventional as contended by the Examiner in the Remarks involving rejected claims 2, 4-5, 7, 9, 11, 15-17, 19, 21 and 23 in combination with the subject matter of the independent claims.

Claims 1-25 stand rejected provisionally on grounds of double patenting over claims 25-33 of copending Application No. 09/940,640.

It is Applicant's current intention upon the allowance of the claims in both applications to file a Terminal Disclaimer. Accordingly, the provisional double patenting rejection is currently moot.

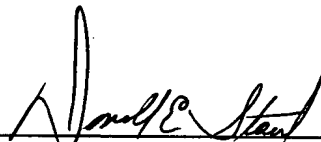
In view of the foregoing amendments and remarks, it is submitted that each of the claims in the application is in condition for allowance. Accordingly, early allowance thereof is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in fees due in connection with the

filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (0173.40791X00) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

A handwritten signature in black ink, appearing to read "Donald E. Stout", is written over a horizontal line.

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Attachments

DES:dlh